evaluate their equity position (or option) only in the event of a crisis or trigger event, such as job loss or divorce (Vandell 1995). Most recent studies of default use a combination of these frameworks.

Empirically, researchers have found evidence supporting the complementary views of the option-based and adverse trigger-event frameworks. The loan-to-value ratio, the value of the prepayment option, and the local unemployment rates have been found to have consistent impacts on both mortgage default and prepayment. Also, certain characteristics of the borrower and the financial and servicing institutions have a consistent effect. For instance, Quercia, Pennington-Cross, and Tian (2012) find support for the importance of current loan-to-value ratio, borrower credit, income, and unemployment. As a rule, ability to pay (captured by debt-to-income ratio) has been omitted from most loan termination studies due to methodological considerations.[10] Consistent with prior work, we use three months late in payments (90 days delinquency) to model the default decision.

The savings resulting from energy efficiency, as discussed previously, can be viewed as a cushion to unanticipated crisis or adverse events that could make mortgage repayment more difficult. It is also likely that homeowners in the market for efficient homes weigh the long-term savings derived from energy efficiency against the short-term higher costs, thus reflecting a higher degree of financial savvy. On the basis of the mortgage termination literature, we expect mortgages on energy-efficient homes to have a lower probability of default than those on less efficient ones.

Research Design and Methods

Researchers often apply hazard analysis in mortgage evaluation to deal with the right censoring issue or the fact that borrowers may terminate their mortgage after

[10] Two exceptions include Quercia, Pennington-Cross and Tian (2012)and Berkovec et al. (1998).